

REMARKS

Status of Claims

Claims 1-41 are pending. Claims 1-22 have been provisionally rejected under the judicially-created doctrine of obviousness-type double patenting and under 35 U.S.C. §103(a). Claims 23-41 have been cancelled without prejudice. Claims 1 and 8 have been amended. Support for the amendment made to claim 1 is found at page 8, lines 12-22, of the specification as originally filed. Claims 1-22 remain for consideration upon entry of the present Amendment. No new matter has been added.

Election/Restriction

Further to a telephone conversation between the Examiner and Arthur Dionne of this office on November 10, 2002, Applicants hereby elect, without traverse, to prosecute the invention of Group I, claims 1-22. As stated above, claims 23-41 have been cancelled without prejudice.

Claim Objection

The Examiner has objected to claim 8 because of the misspelling of the term "dimethacrylate." Applicants have accordingly amended claim 8 to reflect the proper spelling of the term.

Double Patenting

Claims 1-22 have been provisionally rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42 of copending application serial number 09/898,969 in view of U.S. Patent No. 5,695,837 to Everaerts et al. (hereinafter "Everaerts '837"). In response to the Examiner's provisional rejection, a timely filed terminal disclaimer is filed herewith.

Claim Rejections – 35 U.S.C. §103(a)

Claims 1-17, 19, and 22 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,612,136 to Everaerts et al. (hereinafter "Everaerts '136") in view of Everaerts '837. The Examiner alleges that Everaerts '136 discloses the core layer as comprising an acrylic copolymer that may incorporate similar or dissimilar acrylic monomers having similar or different additives from those acrylic

copolymers contained in the adhesive layer. The core layer comprises about 80 parts or more of an alkyl monomer and up to about 20 parts of a copolymerizable modifier monomer, based upon 100 parts by weight of acrylic monomer, i.e., alkyl acrylate monomer plus modifier monomer. The Examiner further alleges that Everaerts '136 fails to disclose at least one layer of heat-activated adhesive disposed onto one side of the core layer but that because the adhesive compositions in both the primary and secondary references (Everaerts '136 and Everaerts '837 respectively) are identical and Everaerts '837 teaches that the acrylic adhesive composition can be formulated to be a heat-activated adhesive by polymerizing methods, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate the acrylic adhesive of Everaerts '136 to be a heat-activated adhesive motivated by the desire to obtain the adhesive composition that had excellent aging and light stability properties. To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Everaerts '136 discloses a pressure-sensitive adhesive having improved adhesion to acid-rain resistant automotive paints. The adhesive comprises a cross-linked copolymer comprising at least one monomer selected from the group consisting of monofunctional unsaturated meth(acrylate) esters, a nitrogen-containing basic monomer that is copolymerizable with the ester(s), an optional copolymerizable acidic monomer, and a cross-linking agent. (Column 3, line 49, to column 4, line 57).

Everaerts '837 discloses adhesives that are "acrylic polymers that are tackified with a water white, hydrogenated, aromatic hydrocarbon tackifying resin...." (Column 3, lines 48-51). The acrylic polymer is the reaction product of at least one alkyl acrylate monomer and an optional monoethylenically unsaturated reinforcing co-monomer copolymerizable with the acrylate monomer. (Column 6, lines 6-24). The adhesive can be formulated to be a hot-melt adhesive and/or a heat-activated adhesive by any one of a variety of disclosed polymerization methods. (Column 8, lines 39-41). Useful tackifying resins are "hydrogenated petroleum hydrocarbon resins that may be produced by catalytic polymerization of principally aromatic monomers." (Column 4, lines 21-23). The tackifier can be prepared by the Friedel-Crafts polymerization of steam-cracked distillates and the catalytic hydrogenation of the polymerization reaction. (Column 4, lines 33-43).

Claim 1 recites an acrylic foam-like adhesive tape comprising at least one layer of a heat-activated adhesive disposed on at least one side of the backing of the tape. The heat-activated adhesive comprises a polyamide, a polyester, a polyolefin, a urethane, a polyurethane, a block copolymer, an elastomer, a block copolymer rubber, or a combination of the foregoing materials.

Both Everaerts '136 and Everaerts '837 fail to disclose, teach, or suggest a heat-activated adhesive comprising a polyamide, a polyester, a polyolefin, a urethane, a polyurethane, a block copolymer, an elastomer, a block copolymer rubber, or a combination of the foregoing materials, as is recited in Applicants' amended claim 1. An adhesive facilitates the bonding of substances together via attachment of the substance surfaces. A tackifier, on the other hand, merely enhances the stickiness of an adhesive. The adhesive as disclosed by Everaerts '136 is defined by the product of the polymerized acrylate ester and the copolymerizable monomer. The tackifier of Everaerts '837 is a polymerized and hydrogenated monomer of a Heartcut Distillate that enhances the stickiness of the polymerized product of the acrylate ester and the copolymerized monomer but provides no adhesive quality. Applicants' heat-activated adhesive comprising the polyamide, polyester, polyolefin, urethane, polyurethane, block copolymer, elastomer block copolymer rubber, or combination of the foregoing materials is patentably distinct from either the acrylate ester adhesive of Everaerts '136 or the tackifier of Everaerts '837.

Furthermore, the combination of Everaerts '136 and Everaerts '837 fails to disclose, teach, or suggest a heat-activated adhesive comprising a polyamide, a polyester, a polyolefin, a urethane, a polyurethane, a block copolymer, an elastomer, a block copolymer rubber, or a combination of the foregoing materials, as is recited in Applicants' amended claim 1. The combination of the polymerized acrylate ester and the attendant copolymerizable monomer (of either Everaerts reference) and the tackifier (of Everaerts '837) results in a polymerized acrylate ester/copolymerizable monomer mixture having improved tack. Such a combination lacks the heat-activatable adhesive comprising a polyamide, a polyester, a polyolefin, a urethane, a polyurethane, a block copolymer, an elastomer, a block copolymer rubber, or a combination of the foregoing materials, as is claimed in Applicants' amended claim 1.

Because neither Everaerts '136 nor Everaerts '837, alone or in any combination, discloses, teaches, or suggests what Applicants claim in their amended claim 1, viz., a heat-activated adhesive comprising a polyamide, a polyester, a polyolefin, a urethane, a polyurethane, a block copolymer, an elastomer, a block copolymer rubber, or a combination of the foregoing materials, neither Everaerts '136 nor Everaerts '837, alone or in any combination, teach or suggest all of the claim limitations of Applicants' invention. Consequently, because not all of the claim limitations are taught by the cited references, a prima facie case of obviousness is not established. Therefore, Applicants' claim 1 is necessarily non-obvious.

Because claims 2-17 and 22 depend from claim 1, and because claims that depend from a non-obvious claim are themselves non-obvious, claims 2-17 and 22 are necessarily non-obvious. Applicants, therefore, respectfully submit that claims 2-17 and 22 are allowable.

Claims 18, 20, and 21 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Everaerts '136 in view of Everaerts '837 as applied to claim 12 and further in view of U.S. Patent No. 5,264,278 to Mazurek et al. (hereinafter "Mazurek"). The Examiner alleges that Everaerts '136 and Everaerts '837 fail to disclose 1,4-butanediol diacrylate as a cross-linking agent and a coloring agent as a filler, but that Mazurek does disclose 1,4-butanediol diacrylate incorporated into the adhesive composition as a cross-linking agent and a dye used as a filler and that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a dye into the core layer motivated by the desire to colorize the adhesive tape.

The teachings of Everaerts '136 and Everaerts '837 are presented above. Mazurek teaches 1,4-butanediol diacrylate incorporated into the adhesive composition as a cross-linking agent. Everaerts '136, Everaerts '837, and Mazurek, alone and in any combination with each other, fail to teach a heat-activated adhesive comprising a polyamide, a polyester, a polyolefin, a urethane, a polyurethane, a block copolymer, an elastomer, a block copolymer rubber, or a combination of the foregoing materials, as is recited in claim 1 from which claims 12, 18, 20, and 21 ultimately depend. Because claims 12, 18, 20, and 21 depend from claim 1, and because claims that depend from a non-obvious claim are themselves non-obvious, claims 12, 18, 20, and 21 are necessarily non-obvious. Applicants, therefore, respectfully submit that claims 18, 20, and 21 are allowable.

Claims 10 and 16 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Everaerts '136 in view of Everaerts '837 as applied to claims 1 and 12 and further in view of U.S. Patent No. 5,521,227 to Palazzotto et al. (hereinafter "Palazzotto"). The Examiner alleges that Everaerts '837 discloses hydrophobic silica being used as a filler in the core layer, that Everaerts '136 and Everaerts '837 fail to specify the hydrophobic silica being the fumed silica, and that Palazzotto discloses the hydrophobic silica being a fumed silica. The Examiner further alleges that it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the fumed silica into the foam layer because the fumed silica is typically known as the hydrophobic silica.

The teachings of Everaerts '136 and Everaerts '837 are presented above. Palazzotto teaches, in his comparative examples, pressure sensitive adhesives in which syrups containing hydrophobic fumed silica are added to the adhesives. Palazzotto fails to teach a heat-activated adhesive comprising a polyamide, a polyester, a polyolefin, a urethane, a polyurethane, a block copolymer, an elastomer, a block copolymer rubber, or a combination of the foregoing materials, as is recited in claim 1 from which claims 10, 12 and 16 depend. Because claims 10, 12, and 16 depend from claim 1, and because claims that depend from a non-obvious claim are themselves non-obvious, claims 10, 12, and 16 are necessarily non-obvious. Applicants, therefore, respectfully submit that claims 10 and 16 are allowable.

Claim 20 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Everaerts '136 in view of Everaerts '837 as applied to claim 12 and further in view of Palazzotto and Mazurek. The Examiner alleges that Everaerts '136 discloses the photoinitiator being benzoin ethyl ether, that Everaerts-'837 discloses hydrophobic silica being used as a filler in the core layer and that both Everaerts '136 and Everaerts '837 fail to specify the hydrophobic silica being the fumed silica. The Examiner further alleges that Palazzotto discloses the hydrophobic silica essentially being a fumed silica and that it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the fumed silica into the foam layer because the fumed silica is typically known as the hydrophobic silica. The Examiner further alleges that Everaerts '136, Everaerts '837, and Mazurek are silent as to 1,4-butanediol diacrylate in the core layer, but that Mazurek discloses 1,4-butanediol diacrylate being used as a cross-linking agent, and that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated 1,4-butanediol diacrylate into the core layer motivated by

the desire to effect cross-linking.

The teachings of Everaerts '136, Everaerts '837, Palazzotto, and Mazurek are presented above. As stated above, Everaerts '136, Everaerts '837, Palazzotto, and Mazurek, alone or in any combination, fail to teach a heat-activated adhesive comprising a polyamide, a polyester, a polyolefin, a urethane, a polyurethane, a block copolymer, an elastomer, a block copolymer rubber, or a combination of the foregoing materials, as is recited in claim 1 from which claims 12 and 20 depend. Because claims 12 and 20 depend from claim 1, and because claims that depend from a non-obvious claim are themselves non-obvious, claims 12 and 20 are necessarily non-obvious. Applicants, therefore respectfully submit that claim 20 is allowable.

Conclusion

Applicants believe that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein are allowable to Applicants. In view of the foregoing points that distinguish Applicants' invention from those of the prior art and render Applicants' invention novel and non-obvious, Applicants respectfully request that the Examiner reconsider the present application, remove the rejections, and allow the application to issue.

If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is invited to telephone the undersigned.

Enclosed, please find a check in the amount of \$110.00 to cover the one-month extension fee. If additional charges are incurred with respect to this Amendment, they may be charged to Deposit Account No. 13-0235 maintained by Applicants' attorneys.

Respectfully submitted,

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